



WOMEN IN SUSTAINABLE DEVELOPMENT: SCIENCE AND QUALITY EDUCATION

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ANIQ FANLAR TALABALARINING JINSGA KO'RA IRODAVIY REGULYATSIYA XUSUSIYATLARI

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Kalit so'zlar: irodaviy harakat, irodaviy sifatlar, sub'ektiv nazorat, irodaviy tartibga solish

Annotatsiya: Ushbu maqolada talabalik davridagi shaxsning ixtiyori, irodaviy fazilatları, irodaviy tartibga solinishi haqida nazariy ma'lumotlar keltirilgan. Bundan tashqari, aniq fanlar talabalarining sub'ektiv nazorat qilish qobiliyatining o'ziga xos jihatlarini va ularning gender farqlarini o'rganish bo'yicha tadqiqotlar olib borildi. Unga ko'ra, aniq fanlar yo'nalishi bo'yicha tahsil olayotgan talabalarda subyektiv nazorat qilish qobiliyati samarali qarorlar qabul qilish va maqsadlarga erishish bilan bog'liq imkoniyatlarni yaratish, salbiy oqibatlarni bartaraf etish imkoniyatlarini topish, shuningdek, ta'lim muassasalarining salbiy oqibatlarini bartaraf etishga yordam beradigan asosiy mexanizmlardan biri ekanligini kuzatishimiz mumkin.

CHARACTERISTICS OF VOLITIONAL REGULATION OF STUDENTS OF EXACT SCIENCES ACCORDING TO GENDER

Key words: volitional action, volitional attributes, subjective control, volitional regulation

Abstract: This article presents theoretical information about the volition, volitional qualities, volitional regulation of a person during the student period. In addition, research was conducted to study specific aspects of the subjective control abilities of students of exact sciences and their gender differences. According to it, we can observe that the ability of subjective control in students studying in the field of specific sciences is one of the main mechanisms that help in creating opportunities related to making effective decisions and achieving goals, finding opportunities to eliminate negative consequences, and their personal and educational activities.

ОСОБЕННОСТИ ВОЛЕВОЙ РЕГУЛЯЦИИ СТУДЕНТОВ ТОЧНЫХ НАУК В ЗАВИСИМОСТИ ОТ ПОЛА

Ключевые слова:	Аннотация:
волевое действие, волевые признаки, субъективный контроль, волевая регуляция.	В данной статье представлены теоретические сведения о воле, волевых качествах, волевой регуляции личности в студенческий период. Кроме того, проводились исследования по изучению особенностей субъективных контрольных способностей студентов точных наук и их гендерных различий. По ней можно наблюдать, что способность к субъективному контролю у студентов, обучающихся в области конкретных наук, является одним из основных механизмов, помогающих в создании возможностей, связанных с принятием эффективных решений и достижением целей, нахождением возможностей устранения негативных последствий и Их личная и воспитательная деятельность.

I. Introduction

Studentship is a period at the crossroads of youth and maturity, which has its own characteristics. By this period, the personality characteristics of the student are also formed to some extent and reach the level of maturity. Students conduct study and work at the same time. Due to the increase in their vital functions and tasks in these activities, the strength of willpower and its management are necessary in the face of difficulties.

Student age is usually characterized by several characteristics. Researcher G. Craig said that in our time, young people are distinguished by age segregation, long-term economic dependence, instability in the world and the influence of mass media. The age distribution shows that during adolescence there is a tendency to actively communicate with peers, communication with younger and older people is less important. In addition, for a long time, young men do not have enough skills to find a well-paid job, so they become financially dependent on their parents. In addition, today the influence of mass media on maturity and development is much stronger.

By the time of the student period, the cognitive sphere of young people does not stop developing rapidly. The ability to use abstract thinking and metacognitive

skills can already be formed in secondary school. These skills improve by late adolescence. As a result, cognitive processes become more refined and flexible, and the development of cognitive tools often takes precedence over actual personal development. Changes in thought processes occur in the university, and over time, students begin to think more flexibly and become more tolerant of competing viewpoints from others. This stage is called conceptual relativism. The final stage will be the stage of choosing an independent position and responsibility for such a choice.

II. Literature review

There is a concept of self-regulated education, which is devoted to the issue of voluntary regulation within the educational process. This concept was created based on Yu. Kuhl's movement control theory. The main idea of this theory is that if the student is consciously and meaningfully involved in his education, the learning process will be more effective. In its early versions, it was assumed that such student participation could be achieved through strong intrinsic motivation. However, the learning environment is complex because students often do not have the initial level of motivation needed to learn new subjects, and there are many external factors that can distract the student. Later, it was concluded that students need special skills of volitional regulation to successfully implement their goals in action and to protect them from interfering influences.

Volitional processes in this theory are part of a larger self-regulatory system. They are understood as thoughts and actions aimed at maintaining the intention to achieve a certain goal in the face of internal and external obstacles. Another definition can be the definition of Lynn Cornot says "Volition is the tendency to focus and act to achieve goals despite possible distractions."

Volitional regulation is involved in maintaining motivation and planning to achieve goals through the strategic management of cognitive and affective processes during task performance [4.P.22]. When putting intentions into action, students can use two main types of strategies: cognitive and volitional. The active use of volitional strategies mediates between intentions and learning strategies,

allowing better protection of learning intention. The use of effective cognitive strategies and metacognitive control of negative emotional states guarantee high efficiency of the educational process [2.P.301].

Volitional qualities include the following components: motivational and executive; moral (view of the world, ideals, attitudes, motives); psychophysiological (innate neuro-dynamic properties: strength, mobility and balance of nervous processes); clear horizontal and vertical structures; gnostic (intellectual activity); motivational (related to sthenic emotions); operational (organization and mobilization of specific actions and actions) [11.P.512].

The strength or inadequacy of the individual willpower of a person determines the specificity of his will regulation, which in turn determines the quality of a person's adaptation to society and the effectiveness of his behavior and activities [3.P.85].

Student age (18-25 years) is very important as a period of personality formation, social relations, roles, life and professional self-determination. It is characterized by the active formation of social relations, the formation and strengthening of the individual's volitional qualities, and the development of the mechanism of emotional and volitional regulation in general. The most important new formations of this period are self-education, self-knowledge (reflection), building life plans, searching for the meaning of life, and professional self-determination [5.P.136].

The characteristic features of the development of the emotional-volitional sphere in this period are the strengthening of the motives of conscious behavior, the strengthening of volitional qualities, but nevertheless, volitional regulation does not reach its maximum level due to the high level of impulsivity and enthusiasm in this age. Student age is a sensitive period for the development of the basic sociogenic potentials of a person and stimulates the development of voluntary regulation in the field of behavior and professional activity [15.P.138].

Volitional qualities are specific features of volitional regulation, which are manifested in specific conditions, depending on the nature of the challenge to be overcome. Each volitional quality has its own psychophysiological structure.

When we talk about the composition of volitional qualities, we mean their totality (their number, differences and connections between them), different authors distinguish from 10 to 34 volitional qualities of a person (N.F. Dobriynin, V.K. Kalin, S.A. Petukhov, A. Ts. Pugni). P.A. Rudik, R. Assagioli). Russian psychologists define the existence of 20 volitional qualities. But it failed to consolidate the lists and definitions of volitional qualities in various psychology textbooks and manuals [7.P.3].

Willing qualities of a person can develop throughout life. Their development has two directions: general and specialized. If the general development of the will consists in the comprehensive development of volitional qualities and their manifestation in all types of activity (for example, education, work, sports), then specialized development is characterized by the improvement of qualities that have some specific characteristics in certain situations [16.P.145].

According to A.A. Nortov's research conclusion, there are two main characteristics of volitional qualities: the general activity of a person and the quality of performance of activity. Nevertheless, there was a positive relationship between volitional regulation strategies and the level of meaningfulness of life, as well as the development of volitional regulation, self-control and academic achievement among students. In addition, volitional regulation also has a gender-specific feature, which is clearly manifested at the student age [1.P.15].

Volition is one of the human qualities that are potentially inherent before birth and can also be developed throughout life. The circle of strong will is as large as the circle of weak will. The desire to strengthen one's will, to expand the range of application of voluntary action, is often found in people who localize internal control. Localization of control is the tendency of a person to assign responsibility for the results of actions to external or internal forces. Internal forces people often feel personal responsibility for their actions, explain them with their personal

characteristics, so they strive to work on themselves, improve themselves, including developing their will [13.P.288].

III. Result

The purpose of the research conducted by us is to study the specific aspects of volitional regulation in students of a higher education institution studying in the field of specific sciences, the existence of differences according to gender characteristics. The table below shows the number of respondents and their percentages, according to which the total number of respondents is 190, of which 107 are boys (56.3%) and 83 are girls (43.7%). The object of the study is a group of students who are all studying specific subjects.

Table 1

A contingent of research subjects

Respondents	Number	Percent %
Boys	107 of them	56.3 %
Girls	83	43.7 %
Total:	190	100.0 %

In psychology, internality is related to the problem of responsibility. Responsibility acts as an important personal characteristic and reflects the range of personal duties of a person. Obligation means a person's duty to someone or his conscience, and conscience means awareness and experience of responsibility.

A person's sense of responsibility is determined by a number of factors, including cognitive, motivational, characteristic, situational, and others. The psychological condition of responsibility is the possibility of choice, that is, the conscious preference for a certain course of action. The choice can be made in complex conditions, for example, in conflicting situations where the interests of an individual, a group of people or society collide. Therefore, we considered it appropriate to use Dj. Rotter's "Subjective control level" psycho-diagnostic methodology, which helps to research all aspects of internality.

The results obtained by checking the compliance of Dj. Rotter's "Subjective control level" methodology with the normal distribution law according to the Kolmogorov-Smirnov criterion were as follows: according to the general internality scale ($Z=1.792$; $r\leq 0.01$), according to the success internality scale ($Z=3.200$; $r\leq 0.001$), according to the scale of internality in failure ($Z=1.823$; $r\leq 0.01$), according to the scale of internality in family relations ($Z=1.566$; $r\leq 0.05$), according to the scale of internality in industrial relations ($Z=1.107$; $r\geq 0.05$), according to the scale of internality in interpersonal relations ($Z=2.043$; $r\leq 0.001$), according to the scale of internality in health ($Z=1.446$; $r\leq 0.05$). It was determined that 90% of the obtained results correspond to non-parametric criteria according to the law of normal distribution.

Table 2

Checking the compliance of Dj. Rotter's "Subjective control level" methodology with the law of normal distribution (n=190)

Indicators	N	Average value	st deviation	Z	p
General internality	190	27,53	23,18	1,792	0,003**
Internality in success	190	7,86	8,84	3,200	0,000***
Internality in failure	190	6,82	7,46	1,823	0,003**
Internality in family relationship	190	4,17	6,10	1,566	0,015*
Internality in producing relationship	190	3,98	5,60	1,107	0,172
Internality in interpersonal relationship	190	3,68	4,47	2,043	0,000***
Internality in health	190	3,33	4,44	1,446	0,031*

Explanation: * $p\leq 0,05$ (95%), ** $p\leq 0,01$ (99%), *** $p\leq 0,001$ (99,9%).

The methodology used by us in the above research is a culturally adapted version of the American psychologist DJ Rotter's questionnaire. With its help, it is possible to assess the level of subjective control over various situations, in other words, it is possible to determine the level of responsibility of a person for his actions and life. Individuals differ in how they explain the causes of and localize control over important events. Two polar types of such localization are possible: external (external location) and internal (internal location). The first type manifests

itself when a person believes that what is happening to him is the result of external causes (for example, chance or the intervention of other people) and is not due to him. In the second case, a person interprets important events as the result of his actions. Considering the two polar types of localization, it should be remembered that each person has his own subjective control over important situations. A particular individual's locus of control is less or less universal in relation to the various events in which he or she succeeds or fails.

In general, individuals with an external locus of control tend to be more conformist and conformist, prefer to work in groups, and are often passive, dependent, anxious, and insecure. Individuals with an internal location are more active, independent, independent at work, they often have a positive self-esteem, which is associated with self-confidence and tolerance for other people. Thus, the level of internality of each person is related to his development and personal growth.

Table 3

**Gender difference according to the Mann-Whitney criterion of DJ Rotter's
"Subjective control level" method**

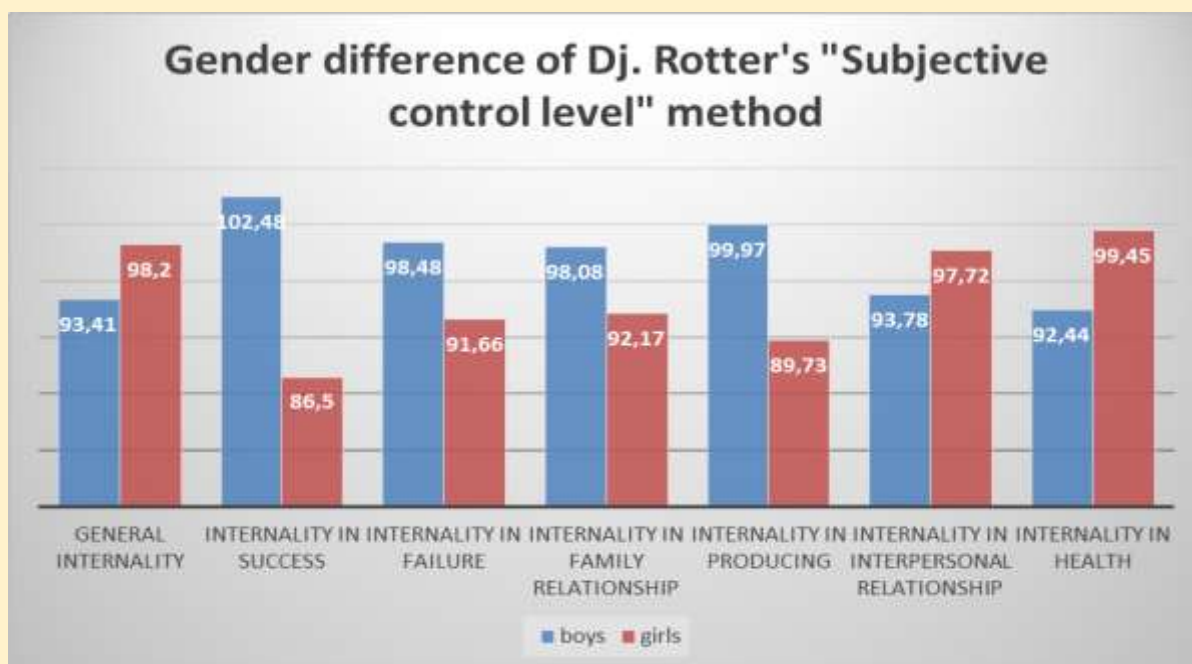
Indicators	Gender	N=190	Average color	U
General internality	Boys	107	93,41	4216,500
	Girls	83	98,20	
Internality in success	Boys	107	102,48	3693,500*
	Girls	83	86,50	
Internality in failure	Boys	107	98,48	4122,000
	Girls	83	91,66	
Internality in family relationship	Boys	107	98,08	4164,500
	Girls	83	92,17	
Internality producing relationship	Boys	107	99,97	3962,000
	Girls	83	89,73	
Internality in interpersonal relationship	Boys	107	93,78	4256,500
	Girls	83	97,72	
Internality in health	Boys	107	92,44	4113,000
	Girls	83	99,45	

Subjective level of control is a generalized personality trait that manifests itself in similar ways in different situations. According to scientists, the level of subjective control is related to a person's sense of responsibility for the events that are happening “here and now”, as well as long-term consequences, that is, social maturity and personal independence.

Internal type individuals evaluate all important events that happen to them as a result of their activities. They work more efficiently in solitude, are more active in searching for information. In addition, introverts are better at work that requires initiative. They are more determined, self-confident, principled in interpersonal relationships, and not afraid to take risks. Research shows that internal individuals are able to successfully implement directive leadership.

The following results were observed when analyzing gender differences according to the Mann-Whitney criterion of Dj. Rotter’s “Subjective control level” method. According to the index of general internality, the average color index of boys was lower than the average color index of girls, and no significant differences were observed between them ($U=4216.500$; $p\leq 0.551$). From the analysis of the obtained results, girls, like boys, have a strong sense of understanding that the most important events in their lives are the result of their actions and that they can control them. Girls feel responsible for events and the development of their lives in general. There is almost no difference in boys and girls from the point of view of the uniformity of the direction they study, the existence of responsibility, responsibility, normal response to various events.

Figure 1



According to the indicator of internality in success, the average colour index of boys was higher than the average colour index of girls, and significant differences were observed between them ($U=3693.500$; $p \leq 0.05$). Young men have high subjective control over emotionally positive events and situations, and they believe that they have achieved everything they have and have in their lives, and that they can successfully achieve their goals in the future. The lower level of internality in success in girls is also characterized by the fact that aspects such as being under the control of parents, not feeling alone, are the key to their success in terms of our mental characteristics.

According to the Internality in Failure index, the mean color index of boys was higher than the mean color index of girls, and no significant differences were observed between them ($U=4122,000$; $p \leq 0.396$). From this result, both boys and girls try to avoid possible failures in their personal lives. They do not have differences in subjective control over negative events and situations, which leads to differences in the manifestation of the tendency to blame oneself for various failures, problems and difficulties.

There were no significant differences between the results of the test subjects in terms of other indicators of this methodology, and these aspects show that both boys and girls are equally responsible for the events in their family life, their

actions are an important factor in organizing production activities, developing relationships in the team, and in their development, and connecting themselves with other people. able to manage their informal relationships, to arouse respect and sympathy for themselves, allows us to evaluate as a result of the similarity of their views in the fact that they consider themselves mainly responsible for their health (if they are sick, they blame themselves for it, and recovery largely depends on their own actions).

Table 4

Indicator of intercorrelation of Dj. Rotter's "Subjective control level" methodology (according to Ch. Spearman's criterion)

Indicators	General internality	Internality in success	Internality in failure	Internality in family relationship	Internality in producing relationship	Internality in interpersonal relationship	Internality in health
General internality	1,000	0,187**	0,430**	0,078	0,046	0,120	0,075
Internality in success		1,000	0,167*	0,213**	0,181*	0,048	0,278**
Internality in failure			1,000	-0,063	0,119	0,003	-0,087
Internality in family relationship				1,000	0,203**	0,080	0,049
Internality in producing relationship					1,000	0,107	0,076
Internality in interpersonal relationship						1,000	0,035
Internality in health							1,000

The analysis of the results of the correlation index of students studying in specialized fields of science based on the “Subjective control level” methodology was as follows: as a person develops a sense of internal control, which expresses the ability to assess the situation, be ready for various extreme situations, and be tolerant of events, in it, the search for success at the root of all events, mobility,

ability to control oneself in achieving effective results, belief that the key to all achievements is voluntary self-control is increasing ($r=0.187$; $p\leq 0.01$).

The level of activity of a person in achieving his goals, the independence of his actions, the increase in his awareness that most of the important events in his life are the result of his actions lead to a person's search for the real, root cause of success in himself, and an increase in his sense of responsibility ($r=0.430$; $p\leq 0.01$). This makes it possible for a person to understand the ability to control the situation, personal responsibility for what is happening, and the important role that the person plays in solving various life situations.

Internality in success, in turn, is related to family ($r=0.213$; $p\leq 0.01$), resolution of conflict situations of a production nature ($r=0.181$; $p\leq 0.05$) and a positive attitude to the disease (studying the cause of the disease, a high desire for treatment, taking preventive measures to avoid getting sick) ($r=0.278$; $p\leq 0.01$), motivates to realize the need to fight for oneself.

Real acceptance of all ups and downs in family life, striving to find the right and acceptable solution to existing problems, increasing acceptance of family responsibility, cooperation in interpersonal relationships, correct understanding of one's partner, striving for effective communication process, self-management of informal relationships with other people, as it leads to an increase in the dynamics of efforts to arouse respect and sympathy for oneself ($r=0.203$; $p\leq 0.01$).

Based on the analysis of the above research results, a person's ability to change the situation and quickly adapt to changing world conditions is determined by the degree of development of the level of subjective self-control. We can observe that the ability of subjective control in students engaged in specific sciences is important in their personal and educational activities as one of the main mechanisms helping to create opportunities related to making effective decisions and achieving goals, and finding opportunities to eliminate negative consequences.

REFERENCE

- [1].Corno, L. The best_laid plans // *Educational Researcher*. 1993. Vol. 22. P. 14-22.
- [2].Corno, L., Kanfer, R., The role of volition in learning and performance // *Review of research in education*. 1993. Vol. 19. P. 301-341.
- [3].Kalin V.K. Volitional regulation of activity. Tbilisi, 1989. P. 85.
- [4]. Il'in E.P. Psychology of will. Petersburg: Peter, 2000. Pp. 20–38.
- [5]. Nartov A.A. (2017) Volevaya samoregulyatsiya studentov: analiz osnovnykh napravlenii issledovaniy [Individually-psychological correlates of conflict behavior strategies for students]. *Psikhologiya. Istoriko-kriticheskie obzory i sovremennye issledovaniya* [Psychology. Historicalcritical Reviews and Current Researches], 6 (4A), pp. 136-145.
- [6]. Zimmerman B.J. Dimensions of academic selfregulation: A conceptual framework for education // Schunk D.H.,
- [7]. Zimmerman B.J. (eds). Selfregulation of learning and performance: Issues and educational applications. Hillsdale, NJ: 1994.P. 3–21.
- [8].Иванников, В.А. Психологические механизмы волевой регуляции [Текст] / В.А. Иванников. – М.: Питер, 2006. – 208 с.
- [9]. Ильин, Е.П. Психология воли [Текст] / Е.П. Ильин. – СПб: Питер, 2000. – С. 20–38.
- [10]. Ильин Е.П. Психология воли. – 2-е изд. – СПб.: Питер, 2009. – 368 с
- [11]. Краткий психологический словарь / под общей ред. А.В. Петровского и М.Г. Ярошевского. – Ростов-на-Дону: Феникс, 1998. – 512 с.
- [12]. Калинин, В.К. Волевая регуляция деятельности [Текст] / В.К. Калинин. – Тбилиси, 1989. – 85 с
- [13]Лазурский, А.Ф. Избранные труды по общей психологии. Психология общая и экспериментальная / А.Ф. Лазурский. – СПб. : Алетейя, 2001.- 288 с.
- [14]. Наливайко Т.В. Особенности проявления жизнестойкости в структуре социально-психологических свойств личности студентов / Т.В. Наливайко, З.А. Шакурова // Вестник южно-уральского государственного университета. – 2010. – № 27. – С. 44-49.

- [15]. Селиванов, В.И. Основные подходы к психологическому исследованию волевой активности личности [Текст] // Экспериментальные исследования волевой активности / В.И. Селиванов. – Рязань, 1986. – 138 с
- [16]. Пуни, А.Ц. Некоторые вопросы теории воли и волевая подготовка в спорте // Психология и современный спорт [Текст] / А.Ц. Пуни. – М.: ФиС, 1973. – С. 144–162.